

IN ABSTRACT:

~~For the purpose of providing an RF coil apparatus capable of forming an arbitrary FOV,~~ a A magnetic resonance imaging apparatus is provided for collecting magnetic resonance signals while applying a static magnetic field, a gradient magnetic field and an RF magnetic field to a subject to be imaged, and producing an image based on the magnetic resonance signals, the apparatus comprising: an RF coil (~~108~~) for conducting at least one of the application of the RF magnetic field and reception of the magnetic resonance signals, in which RF coil, ratios of the electric currents flowing through a plurality of coil elements connected in parallel are adjusted by adjusting device (~~110, 160, 170~~).